

Periodic Table

| Main - Group Elements | | | Transition Elements | | | | | | | | | | Main - Group Elements | | | | | | | |
|-----------------------|--------------------------------|---------------------------------|--------------------------------|-------------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|----------------------------------|---------------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|---------------------------------|-----------------------------|
| Period | 1A (1) | | 2A (2) | | 3B (3) | 4B (4) | 5B (5) | 6B (6) | 7B (7) | (8) | 8B (9) | (10) | 1B (11) | 2B (12) | 3A (13) | 4A (14) | 5A (15) | 6A (16) | 7A (17) | 8A (18) |
| 1 | 1 H Hydrogen 1.008* | | | | | | | | | | | | | | | | | | | 2 He Helium 4.003 |
| 2 | 3 Li Lithium 6.941* | 4 Be Beryllium 9.012 | | | | | | | | | | | | | 5 B Boron 10.811* | 6 C Carbon 12.011* | 7 N Nitrogen 14.007* | 8 O Oxygen 15.999* | 9 F Fluorine 18.998 | 10 Ne Neon 20.180 |
| 3 | 11 Na Sodium 22.990 | 12 Mg Magnesium 24.305 | | | | | | | | | | | | | 13 Al Aluminum 26.982 | 14 Si Silicon 28.086* | 15 P Phosphorous 30.973 | 16 S Sulfur 32.066* | 17 Cl Chlorine 35.453* | 18 Ar Argon 39.948 |
| 4 | 19 K Potassium 39.089 | 20 Ca Calcium 40.078 | 21 Sc Scandium 44.956 | 22 Ti Titanium 47.867 | 23 V Vanadium 50.942 | 24 Cr Chromium 51.996 | 25 Mn Manganese 54.938 | 26 Fe Iron 55.845 | 27 Co Cobalt 58.933 | 28 Ni Nickel 58.693 | 29 Cu Copper 63.546 | 30 Zn Zinc 65.409 | 31 Ga Gallium 69.723 | 32 Ge Germanium 72.610 | 33 As Arsenic 74.922 | 34 Se Selenium 78.960 | 35 Br Bromine 79.904 | 36 Kr Krypton 83.798 | | |
| 5 | 37 Rb Rubidium 85.468 | 38 Sr Strontium 87.620 | 39 Y Yttrium 88.906 | 40 Zr Zirconium 91.224 | 41 Nb Niobium 92.906 | 42 Mo Molybdenum 95.940 | 43 Tc Technetium (98) | 44 Ru Ruthenium 101.070 | 45 Rh Rhodium 102.906 | 46 Pd Palladium 106.42 | 47 Ag Silver 107.868 | 48 Cd Cadmium 112.411 | 49 In Indium 114.800 | 50 Sn Tin 118.710 | 51 Sb Antimony 121.750 | 52 Te Tellurium 127.600 | 53 I Iodine 126.904 | 54 Xe Xenon 131.290 | | |
| 6 | 55 Cs Cesium 132.905 | 56 Ba Barium 137.327 | | 72 Hf Hafnium 178.490 | 73 Ta Tantalum 180.948 | 74 W Tungsten 183.84 | 75 Re Rhenium 186.207 | 76 Os Osmium 190.230 | 77 Ir Iridium 192.217 | 78 Pt Platinum 195.08 | 79 Au Gold 196.967 | 80 Hg Mercury 200.590 | 81 Tl Thallium 204.383* | 82 Pb Lead 207.200 | 83 Bi Bismuth 208.980 | 84 Po Polonium (209) | 85 At Astatine (210) | 86 Rn Radon (222) | | |
| 7 | 87 Fr Francium (223) | 88 Ra Radium (226) | | 104 Rf Rutherfordium (267) | 105 Db Dubnium (268) | 106 Sg Seaborgium (271) | 107 Bh Bohrium (272) | 108 Hs Hassium (270) | 109 Mt Meitnerium (276) | 110 Ds Darmstadtium (281) | 111 Rg Roentgenium (280) | 112 Cn Copernicium (285) | 113 Uut Ununtrium (284) | 114 Fl Flerovium (289) | 115 Uup Ununpentium (288) | 116 Lv Livermorium (293) | 117 Uus Ununseptium (294) | 118 Uuo Ununoctium (294) | | |

Classifications

- Non-Metals
- Metalloids
- Metals
- Transition Metals
- Unknown

— Atomic Number
Number of Protons & Electrons

— Atomic Mass
Average Mass of Protons & Neutrons
Includes isotopes

Groups

- Alkali Metals (1A)
- Alkaline Earth (2A)
- Carbon Family (4A)
- Nitrogen Family (5A)
- Oxygen Family (6A)
- Halogens (7A)
- Noble Gases (8A)
- Diatomic Molecules

Inner-Transition Elements

| | | | | | | | | | | | | | | | | |
|---|------------------------------|----------------------------------|--------------------------------|-------------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------|----------------------------------|----------------------------------|-------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| 6 | Lanthanides (Rare Earths) | 57 La Lanthanum 138.906 | 58 Ce Cerium 140.116 | 59 Pr Praseodymium 140.908 | 60 Nd Neodymium 144.240 | 61 Pm Promethium (147) | 62 Sm Samarium 150.360 | 63 Eu Europium 151.965 | 64 Gd Gadolinium 157.250 | 65 Tb Terbium 158.925 | 66 Dy Dysprosium 162.50 | 67 Ho Holmium 164.930 | 68 Er Erbium 167.260 | 69 Tm Thulium 168.934 | 70 Yb Ytterbium 173.040 | 71 Lu Lutetium 174.967 |
| 7 | Actinides | 89 Ac Actinium 227.028 | 90 Th Thorium 232.038 | 91 Pa Protactinium 231.035 | 92 U Uranium 238.029 | 93 Np Neptunium (237) | 94 Pu Plutonium (244) | 95 Am Americium (243) | 96 Cm Curium (247) | 97 Bk Berkelium (247) | 98 Cf Californium (251) | 99 Es Einsteinium (252) | 100 Fm Fermium (257) | 101 Md Mendelevium (258) | 102 No Nobelium (259) | 103 Lr Lawrencium (262) |

* To more accurately convey variations in atomic mass, the international agency IUPAC, in 2009, set upper and lower bounds of the atomic mass of these elements.